Portal hydatid with secondary cavernomatosis

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CASE REPORT

We report the case of an 81-year-old man treated for a hydatid cyst in segments VII-VIII six years before. The patient presented at the clinic due to discomfort in the right hypochondrium over a two-month period. Hydatid serology showed a titer of 1/800. An ultrasound was requested, which showed a cystic lesion with multiple daughter cysts of an elongated morphology and a size of 11 x 5.5 x 8.8 cm in the left, right and common portal vein in relation to portal hydatidosis (Fig. 1). The computed tomography (CT) scan revealed a cystic elongated, polylobulated and branched lesion of more than 14 cm of longitudinal diameter and 4 cm of transverse diameter occupying the interior of the right, left and main portal vein. As well as portal cavernomatosis with collateral circulation and esophageal varices (Figs. 2 and 3). The patient received medical treatment and is currently asymptomatic.

DISCUSSION

The complication rate of hydatid cysts in the portal vein with cavernomatosis is very rare. There are few cases reported in the literature (1), the first one being described in 1998 (2).
Portal cavernomatosis is a dilatation of the paracholedochal and pericholedochal veins and it is generally secondary to portal vein thrombosis (3). It is an uncommon disease.

Portal involvement is caused by several mechanisms:

– Extrinsic compression.
– Invasion of vessels which looks like a thrombosis due to an inflammatory reaction in the vessel wall caused by external compression of the cyst, which facilitates the creation of a cyst-portal fistula thus allowing passage of daughter cysts to the vascular lumen.
– Cyst rupture, which occurs in 50-90% of cases.

The clinical manifestation is usually abdominal pain in the right hypochondrium with or without nausea and vomiting. The diagnosis is based on the detection of specific serum antibodies. Plain standard X-ray is used in imaging tests to detect calcified cysts, which occur in 20-30% of the cases.

Abdominal ultrasound is the most widely used technique since it is easy, inexpensive and has a sensitivity of 90-95%. In 1981, Gharbi et al. published an ultrasonographic classification based on structure and morphology. In 2003, the World Health Organization proposed a new classification, the World Health Organization Informal Working Group classification (WHO/IWG), based on the natural evolution of lesions.

The treatment of choice for portal hydatid disease is surgery, with the removal of the cyst. In recent years, due to the advances in liver surgery, hepatectomies are being performed with a low morbidity and mortality rate (4), including laparoscopic surgery. The authors have added praziquantel to the treatment schedule (5).

REFERENCES

3. Pedrosa I, Saiz A, Aráosla J. Hydatid disease: Radiologic and pathologic features and complications. Radiographics 2000;20:795-817. DOI: 10.1148/radiographics.20.3.g00ma06795